

Abstract

The invention relates to an apparatus for power control by phase gating of an AC voltage, which supplies an electrical load (14), and for reduction of harmonics which are created by the phase gating, in particular up to a region of 4 kHz, preferably in the region of the third harmonic, having a first circuit element (12) (TRIAC) which is connected in series with the load (14) and is driven by a control device (20) in order to carry out phase gating. The apparatus is distinguished in that a second circuit element (34) is provided in series with a resistance element (32), with the series circuit being arranged in parallel with the first circuit element (12) and with the control device (20) being designed such that it drives the second circuit element (34) shortly before the first circuit element (12) and switches it to the on state for a short time period. The invention also relates to a method for harmonic reduction in the range up to 4 kHz, preferably of the third harmonic, for power control by phase gating.

(Figure 1)